

## ABSTRACT:

The present invention relates to a multiplexing system comprising a set of transcoders ( TC[1] to TC[n] ), a controller ( CONT ) and a multiplexer ( MUX ). The set of transcoders comprises n transcoders, each transcoder ( TC[i] ) allowing an input compressed data signal ( ICS[i] ) encoded at an input bit rate ( Rin[i] ) to be converted into an output compressed data signal ( OCS[i] ) encoded at an output bit rate ( Rout[i] ). The controller ( CONT ) receives from each transcoder parametric information on the regulation process and the video coding complexity and subsequently computes the bit rate allocated ( Rout[i] ) to each transcoder ( TC[i] ) according to a total bit rate capacity available at the output of the multiplexer. The controller receives also parametric information derived from the input compressed data signal ( ICS[i] ), this information being used to improve the bit rate allocation strategy. Finally, the multiplexer ( MUX ) provides a multiplexed data signal ( MS ) by multiplexing of the output compressed data signals ( OCS[1] to OCS[n] ).

Use: Multi-channel transcoding

Fig. 2